## STATE OF MISSOURI

## DEPARTMENT OF NATURAL RESOURCES

### MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0099503

Owner: Bill Woody, Talon Properties, Inc. Address: 18216 Talon Drive, Holt, MO 64048

Owner: BFI Waste Systems of North America, Inc.

Address: 12976 St. Charles Rock Road, Bridgeton, MO 63044

Continuing Authority: BFI Waste System of North America, Inc

Address: 12976 St. Charles Rock Road, Bridgeton, MO 63044

Facility Name: BFI, Missouri City Landfill

Facility Address: 8501 Stillhouse Road, Liberty, MO 64068

Legal Description: See page two Latitude/Longitude: See page two

Receiving Stream: See page two First Classified Stream and ID: See page two USGS Basin & Sub-watershed No.: See page two

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

#### FACILITY DESCRIPTION

Outfall #001 and #002 - Landfill - SIC #4953

Stormwater runoff from a post closure with leachate collection.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

March 22, 2002 April 8, 2005 Effective Date Modification Date

Doyle Childers, Director, Department of Natural Resources

Executive Secretary, Clean Water Commission

March 21, 2007

**Expiration Date** MO 780-0041 (10-93)

## Facility Description

## Outfall #001

Legal Description: SE ¼, SE ¼, Sec. 5, T51N, R30W, Clay County Latitude/Longitude: +3915120/-09417291

Receiving Stream: Tributary to Cooley Lake (U)

First Classified Stream and ID: Cooley Lake (L3) (07090)

USGS Basin & Sub-watershed No.: (10300101-040003)

### Outfall #002

Legal Description: NE ¼, NE ¼, Sec. 8, T51N, R30W, Clay County

Latitude/Longitude: +3915017/-09417265

Receiving Stream: Tributary to Missouri River (U)

First Classified Stream and ID: Missouri River (P) (00356)

USGS Basin & Sub-watershed No.: (10300101-040003)

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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PERMIT NUMBER MO-0099503

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

		FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 & #002						
Flow	MGD	*		*	monthly total	24 hr. estimate
Rainfall	inches	*		*	daily measuremen	nt **
BETX	mg/L	0.75		0.75	once/quarter***	grab
Biochemical Oxygen Demand <sub>5</sub>	mg/L	60		45	once/quarter***	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter***	grab
Total Suspended Solids	mg/L	80		60	once/quarter***	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter***	grab
Total Dissolved Solids	mg/L	*		*	once/quarter***	grab
Conductivity (Specific Conductance)	micromhos /cm	*		*	once/quarter***	grab
Chloride Plus Sulfates	mg/L	1000		*	once/quarter***	grab
Iron, Total Recoverable	mg/L	*		*	once/quarter***	grab
pH - Units MONITORING REPORTS SHALL BE SUB	SU MITTED OUADE	****	FIDST DED	****	once/quarter***	grab
		*	TINOT NEFC	*	· · · · ·	
Calcium	mg/L	*		*	once/year****	grab
Fluoride	μg/L	*		*	once/year****	grab
Total Hardness	μg/L	*		*	once/year****	grab
Barium, Total Recoverable	μg/L	*		*	once/year****	grab
Boron, Total Recoverable	μg/L	*		*	once/year****	grab
Cadmium, Total Recoverable	μg/L	*		*	once/year****	grab
Chromium, Total Recoverable	μg/L	*		*	once/year****	grab
Cobalt, Total Recoverable	μg/L	*		*	once/year****	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2005. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

## **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 4 of 7

PERMIT NUMBER MO-0099503

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS					
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE				
Outfalls #001 & #002 (continued)										
Copper, Total Recoverable	μg/L	*		*	once/year****	grab				
Sodium, Total Recoverable	μg/L	*		*	once/year****	grab				
Ammonia as N	mg/L	*****		*****	once/year****	grab				
Nitrate and Nitrite as N	μg/L	*		*	once/year****	grab				
Phosphorus, Total Recoverable	μg/L	*		*	once/year****	grab				
Mercury, Total Recoverable	μg/L	*		*	once/year****	grab				
Arsenic, Total Recoverable	μg/L	*		*	once/year****	grab				
Lead, Total Recoverable	μg/L	*		*	once/year****	grab				
Selenium, Total Recoverable	μg/L	*		*	once/year****	grab				
Silver, Total Recoverable	μg/L	*		*	once/year****	grab				
Manganese, Total Recoverable	μg/L	*		*	once/year****	grab				
Magnesium, Total Recoverable	μg/L	*		*	once/year****	grab				
Zinc, Total Recoverable	μg/L	*		*	once/year****	grab				
Antimony, Total Recoverable	μg/L	*		*	once/year****	grab				
Beryllium, Total Recoverable	μg/L	*		*	once/year****	grab				
Nickel, Total Recoverable	μg/L	*		*	once/year****	grab				
Sulfate	mg/L	*		*	once/year****	grab				
Thallium, Total Recoverable	μg/L	*		*	once/year****	grab				
Total Organic Carbon	mg/L	*		*	once/year****	grab				
Vanadium, Total Recoverable	μg/L	*		*	once/year****	grab				
Oil & Grease	mg/L	15		10	once/year****	grab				
Total Toxic Organics (Note 1)	mg/L	*	IDOT DEDO	*	once/year****	grab				

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2005. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
- \*\*\* Sample once per quarter in the months of February, May, August, and November.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH unit.
- \*\*\*\* Samples to be taken in November.
- \*\*\*\*\* The discharge shall not exceed the appropriate values in table B 10 CSR 20, 7.031.

#### Note 1 - Total Toxic Organics

Acenaphthene Acrolein Acrylonitrile Benzene Benzidine Carbon Tetrachloride (tetrachloromethane) Chlorobenzene 1,2,4-trichlorobenzene Hexachlorobenzene 1,2-dichloroethane 1,1,1-trichloroethane Hexachloroethane 1,1-dichloroethane 1,1,2-trichloroethane 1,1,2,2-tetrachloroethane Chloroethane Bis (2-chloroethyl) ether 2-chloroethyl vinyl ether N-nitrosodi-n-propylamine Pentachlorophenol Phenol Bis (2-ethylhexyl) phthalate Alpha-BHC Butyl benzyl phthalate Di-n-butyl phthalate (2,3-o-phenylene pyrene) Di-n-octyl phthalate Diethyl phthalate Dimethyl phthalate 1,2-benzanthracene (benzo(a)anthracene) Benzo(a)pyrene (3,4-benzopyrene) 3,4-benzofluoranthene (benzo(b)fluoranthene) 11,12-benzofluoranthene (benzo(k)fluoranthene) Chrysene metabolites) Anthracene 1,12-benzoperylene (benzo(ghi)perylene) Fluorene 2-chloronaphthalene 2,4,6-trichlorophenol Parachlorometa cresol Chloroform (trichloromethane) 2-chlorophenol 1,2-dichlorobenzene 1,3-dichlorobenzene hexachlorocyclohexane)

4-chlorophenyl phenyl ether 4-bromophenyl phenyl ether Bis (2-chloroisopropyl) ether Bis (2-chloroethoxy) methane Methylene Chloride (dichloromethane) Methyl Chloride (chloromethane) Methyl bromide (bromomethane) Bromoform (tribromomethane) Dichlorobromomethane Chlorodibromemethane Hexachlorobutadiene Hexachlorocyclopentadiene Isophorone Naphthalene Nitrobenzene 2-nitrophenol 4-nitrophenol 2,4-dinitrophenol 4,6-dintro-o-cresol N-nitrosodimethylamine N-nitrosodiphenylamine Phenanthrene (dibenzo(a,h)anthracene) 1,2,5,6-dibenzanthracene Indeno (1,2,3-cd) pyrene 1,4-dichorobenzene Pyrene Tetrachloroethylene Toluene Trichloroethylene Vinyl Chloride (chloroethylene) Aldrin Dieldrin Chlordane (technical mixture and 4,4-DDT 4,4-DDE (p,p-DDX) 4,4-DDD (p,p-TDE) Alpha-endosulfan Beta-endosulfan Endosulfan sulfate Endrin Endrin aldehyde Heptachlor

Heptachlor epoxide (BHC

#### Note 1 - Total Toxic Organics (continued)

3,3-dichlorobenzidine Beta-BHC 1,1-dichloroethylene Gamma-BHC 1,2-trans-dichloroethylene Delta-BHC (PCB polychlorinated biphenyls) 2,4-dichlorophenol PCB-1242 (Arochlor 1242) 1,2-dichloropropane (1,3-dichloropropane) PCB-1254 (Arochlor 1254) 2,4-dimethylphenol PCB-1221 (Arochlor 1221) PCB-1232 (Arochlor 1232) 2,4-dinitrotoluene 2,6-dinitrotoluene PCB-1248 (Arochlor 1248) 1,2-diphenylhydrazine PCB-1260 (Arochlor 1260) PCB-1016 (Arochlor 1016) Ethylbenzene Fluoranthene Toxaphene Cvanide 2-Butanone Bromodichloromethane 1,2-Dichloropropane Trans-1,3-Dichloropropene Cis-1,3-Dichloropropene 1,1 Dichloroethene Trichlorofluoromethane Dichloroethene(cis-1,2-) Tetrachloroethene Dichloroethene (trans-1, 2-) Trichloroethene Lindane Methoxychlor 2,4 D Silvex 2,4,5-T 2,3,7,8-TCDD TCDD PCDD HxCDD HpCDD OCDD 2,3,7,8-TCDF TCDF PCDF HxCDF HpCDF OCDF

#### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.

#### C. SPECIAL CONDITIONS (continued)

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100  $\mu g/L$ );
  - (2) Two hundred micrograms per liter (200  $\mu g/L$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu g/L$ ) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.
- 6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
  - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (e) There shall be no significant human health hazard from incidental contact with the water;
  - (f) There shall be no acute toxicity to livestock or wildlife watering;
  - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. This permit does not allow the discharge of leachate.